MAKING NARCISSI BULBS FLOWER FOR YEARS IN POTS

Simple Method of Cultivating These Beautiful Flowering Plants in Window Gardens Year After Year---Be Ready to Make a Start Next Autumn

Narcissus, Queen of the Netherlands.

Last autumn there were no Chinese lilies to be had. On account of the war their importation was prohibited, and this will be the case with other bulbs and plants now that the Federal Horticultural Board has decided to enforce what is known as Quarantine Order No. 37.

Many of the French and Holland bulbs have been excluded from this order, so flower lovers will not be wholly prohibited from the use of bulbs producing the most beautiful flowers with the least care.

In place of Chinese lilies seedsmen and florists last year recommended the Tazetta narcissi. Millions of these bulbs were grown last winter in window gardens and conservatories, in earth, fibre or water.

It is interesting to know that this class of narcissi was cultivated in Egypt a century or more before the birth of Christ, and the flowers were largely used then as now in funeral ceremonies.

Shakespeare, Milton, Wordsworth, Tennyson and other poets have sung the praises of the narcissus.

In England the narcissus was a popular garden flower at a very early date. Gerard in his "Herbal," 1597, gives a list of narcissi in cultivation at that time. Parkinson in his work in 1629, Miller in 1739 and other early English gardening authorities give excellent illustrations and descriptions of narcissi.

Daffodils attracted only ordinary attention until about 1884, when, due to the efforts of enterprising British florists, headed by Peter Barr, daffodils came into prominence and new varieties, including one called Peter Barr, were sold, when first introduced, at $250 a bulb and at lesser amounts down to $100 a bulb.

All of the polyanthus narcissi, N. Tazetta, carry from six to twelve blooms on a stem and are sweet scented. Being natives of mild climates, they are not hardy and can only be successfully grown in the garden with the greatest care, planting the bulbs deep, at least five inches, and then protecting them during cold weather with a heavy covering of straw.

In the South, where there are only light frosts during winter, the polyanthus narcissi flourish. The Paper White and Danube Roman are first to flower.

Chinese lilies will likely be in the market again this autumn. In planting them try the Chinese method of making three incisions, longitudinally, about a quarter of an inch deep, with a penknife, about an inch from the top of the bulb, as though the bulbs were to be divided into thirds. The Chinamen say additional leaves will appear from these incisions and also flower stalks. I have never thought of it at planting time, so cannot say whether the theory is correct or not.

In selecting narcissi bulbs do not make the mistake of taking large bulbs. Solid, heavy bulbs, though smaller, are the most desirable; large, solid, heavy bulbs are best. Avoid light weight or soft bulbs.

The usual custom is to throw bulbs away after they have flowered in winter. Properly grown in pots of earth they may be flowered year after year for from four to six years.

Choice varieties that are to be saved are grown on in a cooler temperature, after flowering, until the foliage has ripened, then the pots are turned on their sides, water is withheld and in about a month the bulbs are removed from the soil, the roots and leaves cut off and the bulbs stored in a cool place until July, when they are set out in the open ground. In a year or two the bulbs are taken up and potted again for winter flowering. Protection is afforded against freezing in winter.

Try planting the bulbs in good soil, in fair sized pots, growing them on, without disturbing, for a second year. If successful keep them in the same manner for years.

In the case of rare species use rather small pots at the start and shift into larger pots without breaking the ball of earth of the first pot and without disturbing the roots.

After the plants have flowered place the pots in a cold frame or other cool place, free from frost and where there is sufficient light, until the leaves die down. The pots may then be laid on their sides for a month or six weeks. Examine the plants and those requiring it should be shifted into larger pots. Where the bulbs are not to have larger pots, remove as much of the old soil as practicable without disturbing the roots, and top dress with fresh rich soil.

Place the pots out of doors, as soon as danger of frost has passed, plunging them in a shady spot in the garden until autumn. In the autumn, take up the pots, store them in a cool, dark place for a few weeks, not allowing the soil to dry, until growth begins, when the plants can be brought out from time to time, as wanted for a succession of flowers, and placed in a sunny window, treating them during the winter and spring as for the first year.

The longer the bulbs remain in the same pots the more liberal the supply of liquid and dry manure will be required. Prepared sheep manure is best for this purpose.

By growing the bulbs in the same pots for several years earlier flowers will be produced.

Growing the bulbs in pots in window gardens or in a cool greenhouse, without forcing them and without neglect, does not weaken them, and they may be flowered for several years, which makes the cost within the reach of all.

BULBS TO PLANT IN THE SPRING

By E. I. FARRINGTON.

May is an excellent month for planting the summer and fall flowering bulbs. The list of these bulbs is much longer than the average garden maker realizes. Everybody is familiar with gladioli and dahlias, the latter commonly being considered as bulbs although they are really tubers. Comparatively few amateurs, though, are at all familiar with the montbretias, and yet they are exceedingly satisfactory and cost but little. While the flowers resemble gladiolus blossoms to some extent, they are smaller. Moreover, they throw up one spray after another for weeks. The colors are mostly reds and yellows in different shades, and give a splendid note to the garden in the fall of the year. Of course a few bulbs planted alone would make but a meagre showing, but when they are used in masses the result is surprisingly fine. They are excellent flowers to use in the border to fill in spaces left vacant by early blooming plants like the irises and the peonies. Use them by the dozen, setting the little bulbs about four inches apart and two inches deep. Few flowers are more desirable for cutting, as they last a long while. Although the stems are slender they are strong, and the sprays are well adapted for displaying in the little Japanese bowls which are now popular. There isn't the variety that may be found in gladioli, and yet several new shades are being put on the market and the blossoms are larger than the older sorts. One landscape architect with whom the writer is acquainted says that in his own garden the montbretias have given the greatest satisfaction of all his fall flowering plants.

Tigridias are not worth growing so freely as the montbretias, but they are exceedingly showy, and a few of them add much to the charm of the garden. Tigridias are often called shell flowers, and the large blossoms are among the most brilliant of all bulbous blooms. Unfortunately, though, they last for only a single day, so have no value for cutting. One flower succeeds another, however, in quick succession, shooting up from the same stalk with remarkable rapidity. The writer is always reminded of a roman candle throwing out its bursting shells when he finds his tigridias blooming. While montbretia bulbs are reasonably hardy and may be left in the ground during the winter if given sufficient protection, the tigridia bulbs should be taken up in the fall. They may be kept through the winter if handled in the same way as gladioli bulbs.

Another remarkably good plant, but one not often seen in gardens, is the Peruvian daffodil, often catalogued as Ismene calathina. This is a chaste, lily-like flower, which may be grown in pots indoors in winter or in the garden border in summer. It somewhat resembles the Easter lily except that it has several curious prongs extending beyond the blossoms, creating a very unusual effect. The Peruvian daffodil is exceedingly fragrant. A few flowers will fill a whole garden with perfume, especially at night. Wait until settled warm weather has come before you plant out the bulbs and take them up in the fall. No special culture is needed during the growing season, and the bulbs will flower even in partial shade. A few of them make a most welcome addition to any garden, whether it be large or small.

In the last few years increasing attention has been given to the beautiful plant known as Hall's Amaryllis, often catalogued as Lycoris. This is a bulbous plant, but one which is perfectly hardy. It has a curious habit of growth, however, and one which may cause the amateur to suffer the loss of the plant unless he is familiar with its eccentricities. It comes up not unlike a German iris in the spring, but in July the foliage entirely disappears. Apparently the plant is dead, and that is too often the verdict of the novice. In August or September, however, if the bulb has not been disturbed, several flower stalks suddenly shoot up and produce splendid lilly-like flowers, pink in color and delicately perfumed. So attractive are the blossoms that one leading seedsman has used them for the cover design on his annual catalogue. In order to have a worthwhile effect a dozen bulbs should be used in a group, setting them six inches apart. The flowers look rather strange on their swaying stalks, totally destitute of foliage, and for that reason it may be well to have some low growing flowers, like tufted pansies or sweet alyssum under them, or better still, to plant them just behind early flowering plants which are not over a foot high.

Then there are the summer hyacinths (hyacinthus candecans), stately flowers which grow three feet high and are covered with white, bell shaped blossoms. This is a bulbous plant which requires more room than the others mentioned and makes the best impression when given a bed by itself. It is best to take up the bulbs in winter and store them in a cool cellar.

It isn't necessary to say much about the dahlias except that early planting is by no means necessary. The dahlia is particularly a fall flower and is best saved for a late display. That means that it is not necessary to plant the tubers until late May or early June. Of course it is important that the clumps be divided, only a single tuber being planted in each hole. This tuber will not grow though unless a piece of the neck having an eye is attached. The tuber should always be planted on its side with the eye up. If the plant is pinched back when a foot high it will make a more branching growth and staking will not be necessary. While the older forms are grown in great numbers amateurs will do well to get acquainted with the newer varieties of peony flowered and collarette dahlias. They are among the finest productions yet put out.

NEW REMEDY SUGGESTED FOR SQUASH BUGS.

Two years ago I read in a Western publication that a moth ball pushed down into the centre of a hill of squashes, watermelons or cucumbers would keep the squash bugs away. I laughed, but when I planted crookneck summer squash I pushed two moth balls down about two inches below the surface, in the centre of the hill, after planting the seeds. I was delighted to be able to pick all fine crookneck squashes of a rich golden color from the time of first picking until frost came, with no trouble with bugs.

A year ago I did the same and was rewarded with enough squash for the family and many to give to my friends.

I have told my experience to many gardeners, who invariably laugh at the idea. Now, I read Dr. Britton's, the State entomologist, suggestion, to spread napthaline flakes in the hills as a preventive for squash bugs, and now I have the laugh on my friends, besides having squashes free from bugs for two seasons.

It pays to try new ideas although some of them may not be successful.

HENRY JOHNSON, Connecticut.

Trigida or Shell Flower.

STRIPED BEETLES.

By H. E. HAYDOCK.

When the running vines of cucumber, melon and pumpkin appear striped beetles also make their appearance. If, however, attention is at once given these beetles they will do little damage and it is only when left pretty much to themselves that the damage done may be severe. It is then that the vines wilt and die apparently without reason.

On close examination it will be found that small white worms, the larvae of the striped beetles, are at the root of the plants. I find that dusting the plants with some insecticide in the early morning when the dew is still on them is very effective. Wood ashes are also good to use in this way, and when washed in the soil by rains help also to a slight degree the growth of the plant.

Soon after dusting the plants the beetles will disappear, but when the insecticide is thoroughly washed from the vines by rains they may reappear. This is accounted for by the fact that with the use of their wings these beetles can leave the vicinity of the plants more readily than if they were confined to the ground.

They do not appear to be able, however, to use these wings quickly, and are often so clumsy about it that they fall and begin to crawl along the ground. It is then possible to capture a number of them, thus making sure of their destruction.

Should, however, the beetles be so numerous that there is every prospect of their larvae affecting the roots of the plants, I have found that pouring about the plants, water in which tobacco has been soaked, gives good results. It is also said that a solution of kerosene, soap and water, mixed in the proportion of one gill of kerosene oil to one pound of yellow soap and one gallon of warm water if poured sparingly about the roots destroys the larvae.

EDITOR'S NOTE.—Be very careful in using kerosene oil about the roots of plants. Many plants are very sensitive, and are killed by even a very little kerosene oil.

DIVIDING DAHLIA CLUMP.

GROWING QUINCES.

Quinces are one of the tree fruits that seem to be growing scarcer and commanding better prices as the demand increases.

I have always been fond of the results of the housewife's care of quinces, so when I moved into a new residence in the spring of 1917 I was glad to find a number of trees near the division fence whose branches hung over my side. I made inquiries and found that for some years the fruit had turned black and dropped off. Meeting the owner, I was told that the quinces were wormy and no good. For many years I have been an enthusiast on spraying and saw an opportunity, so I said if he would let me care for those trees I would go fifty-fifty with him on the fruit, which offer was gladly accepted.

The next Saturday afternoon saw my boy and myself giving the trees a thorough spraying with arsenate of lead, as the blossoms had just fallen. Soon after I sprayed with pyrox. At intervals of about three weeks during the summer I sprayed with the same materials, resulting in the owner, myself and the neighbors dividing about six bushels of fruit.

In the spring of 1918 the same agreement was made and the same method of spraying adopted. During the summer I picked off many small fruits, harvesting four bushels of the finest golden quinces.

With the exception of the time given the only cost was the amount paid for spray material, about $1. Fortunately, we obtained sufficient sugar last summer for preserving and we have had quinces all winter.

Going through the country and seeing the neglected quince trees, one wonders if the owners know the fine preserves and jellies or the money that can be had by giving careful attention to the trees.

HENRY JOHNSON, Connecticut.

PERENNIALS FOR EXPOSED AND DRY SITUATIONS.

Perennials can still be set out safely. If planted in well prepared soil they quickly develop and are sure to please. Novices usually have complete success in setting out perennial plants, when they fear to undertake to care for anything more exacting or delicate.

The figures indicate the height of the plants in inches. The letters show the particular usefulness of the plants. B denotes plants that are especially desirable for borders; C those suitable for carpet bedding; E low growing plants good for edging; R plants that do well in rockeries; W good plants for stone walls.

Achilea, the Pearl, white, 24.
Æthionema grandiflora, rose pink, 24. R. B.
Alyssum saxatile, yellow, 12.
Arabis alpina, white, 8.
Artemisia Villarsi, white, 24.
Aubrietias, various colors, 4, W. R. E.
Centranthus ruber, red, 30, W. R.
Cerastium Biebersteinii, white, 6, C. R.
Dianthus arenarius, white, 15.
Dianthus, cæsius, bluish gray, 6, W. R.
Dictamnus fraxinella, pink or white, 30, R. B.
Doronicums, yellow, 30.
Eryngiums, 30.
Galegas, blue and white, 48.
Genums, various colors, 15.
Gypsophilas, white, 24 to 36.
Hellanthemums, various colors, evergreen; low growing evergreens, R.
Linum flavum, yellow, 18.
Lychnis viscaria, red, evergreen, 12.
Sedum, low growing.
Solidago, golden rod, from 15 to 120.
Statices latifolia, blue, 12, B. R.

Next week a list of perennials will be given for cut flowers and for shade and moisture.

Conservatories and greenhouses require shading at this season. Do not use colored shading of any kind. Green shading has been tried, and while it may look well from the outside it is not a success so far as the plants are concerned. White shading that adheres well can be made of slacked lime mixed with sour milk. Late in the autumn the shading should be removed and the glass cleaned.

MY WILD FLOWER BED.

By EMILIE R. WALTER.

After my walks in the Northern woods the first spring I spent in the North my heart was fired with ambition to own a real wild flower bed.

I selected a spot at the front, close to the house, partly shaded by trees, where other flowers did not grow well. The soil was partly yellow clay, which had been thrown out in digging the cellar.

A space three feet wide and the length of the house was dug out to the depth of a foot and filled in with earth in which old shingles had rotted away. Into this I dug some old manure and some gravel left by builders years before.

After the preparation of the bed came the delightful part of the undertaking, when I roamed the woods with basket and trowel looking for choice wild flowers. The question then became what not to take, for I longed to dig up whole dells filled with beauty, and each trip to the woods gave me new kinds of flowers.

First I found the pink and white May flowers and wood anemones of many shades in the leaf mold nooks of the hillsides; the bloodroot, which requires such care to prevent its bleeding, and later the trilliums and columbines, then the little folded fronds of the ferns just pushing through the mold.

Deeper in the woods I found the Jack 'n the pulpit, and everywhere about the woods were beds of blue, white and even yellow violets.

It was a temptation to take the more developed and therefore more beautiful specimens, but I resisted and selected those just showing through the soil but with large, well developed roots on which I left a quantity of the mold so that the plants scarcely felt the removal. They were put into my bed on reaching home or were left in the dew over night and set out early the next morning.

My most wonderful find was the maidenhair fern on its long black glistening stem. These I found among the rocks on the hillsides in the woods' deepest recesses. After planting the ferns I threw over the bed all the moss, wood fibre and earth left in the baskets and some leaf earth which I made by packing in a cement bin all the fall leaves, lawn rakings and yard refuse and placing boards over the top, allowing it to decay.

I kept the bed well watered, and in a little while it looked like a consolidated wood nook, only lacking the beautiful wood surroundings.

Each spring as soon as the earth is firm enough to walk on I set out with basket and trowel to add to my collection. The overflow from the bed went on to a bank by the side of the road where nothing but grass would grow. After top dressing with leaf earth and manure the wild flowers, ferns and yellow lilies have grown in rank profusion and the bank rivalled the bed. Lately I have been fortunate in buying a wheelbarrowful of half wild columbine of many colors and combinations. Last year they were beautiful, and this spring I am looking forward to hundreds of seedlings to add even greater beauty to the flower bed and the bank.

PLANT ENOUGH SEED CORN.

The advice to "Plant one kernel for the blackbird, one for the crow, one for the cutworm and two to grow" is as appropriate now as ever. It is never advisable to plant weak seed, and it is the height of folly to attempt to atone for the weakness of the seed by planting a superabundance, as, irrespective of other conditions, weak seed will produce only low yielding plants. For good harvests it is essential to plant vigorous seed of acclimated and well known varieties. Experts of the United States Department of Agriculture recommend planting the best quality seed a little thicker than the stand desired in order to provide against unfavorable conditions. If these unfavorable conditions do not arise, it is easier to remove a few stalks from the growing crop than it is to replant, which always produces late maturing, unprofitable plants. Plant sufficient seed to secure a good stand, as it is more practicable and profitable to thin a thick stand of corn than to replant a patchy spotted field. With good seed and good soil conditions, about four kernels should be planted for every three stalks desired.

PLANTING TOO THICK DISAPPOINTS.

The home gardener who sows too thickly and allows the plants to grow without thinning will be disappointed in his crop. Thinning permits selection by discarding the weak inferior plants, and provides a uniform stand. When root crops are planted too thickly the roots never develop to a good size, causing a low yield and a poor quality. When other crops are planted thickly they choke each other and none of the plants will develop properly. A thick seeding when not followed by thinning has the same effect as allowing weeds to grow in the row, is the way the matter is stated at the New York State College of Agriculture.

The early root crops, such as bunch onions, beets, turnips, carrots and radishes can sometimes be thinned as used by removing the largest for table use and allowing the smaller to mature. Leaf lettuce, spinach, or chard, if not very thick, also can be thinned as used by removing plants all along the row and not all from the same place.

The individual plants do not require much space at first, but must be given room as they become larger.

For best results on most garden soils the common crops should have the following distances between plants when they are nearly mature: Lettuce (leaf), 6 inches (head, 8 to 10 inches); radish, 3 inches; turnip, 4 inches; beets, 4 inches; carrots, 4 inches; onions (bunch), 1 to 2 inches (dry, 3 to 6 inches); spinach, 6 inches; chard, 8 inches; tomatoes, 24 to 36 inches; cabbage, 20 to 30 inches.

MOTHS LIKE DIRT AND GREASE.

As housecleaning time comes round again we begin to think of storing our winter clothing. Before putting away, the clothing should be cleaned, if possible, and all spots removed, advises the home economics department of the New Jersey State Agricultural College.

Ordinary spots may be removed with soap and warm water; for milk spots use cold water and soap, and for grease spots benzine, taking care not to use this in a room where there is a fire or light, as it is very inflammable. All woollen garments should be thoroughly brushed, the collars, cuffs and pockets being turned wrong side out. Be careful to remove all the dust which may have collected under tucks, seams or top of hem, as the dust and lint which collects in the crevices of clothing makes a fine lodging place for moths.

Hang the garment out in the sun to air, then, if it is likely to be worn occasionally, put on a padded hanger, slip a protector over it and hang in a closet. Worn pillow cases, by the way, make excellent bags to use for dress protectors. The heavier garments which will not be used until next winter should be sewed up in brown wrapping paper or newspapers or put in the heavy paper bags which are sold for the purpose, and stored away on shelves or in drawers or chests.

Putting a few moth or camphor balls, or cedar shavings in the drawer or chest will aid in keeping moths away, but you will find that the greatest protection against moths is to have the clothing thoroughly cleaned and aired.

Plants in sunny windows should be set back out of the direct rays of the sun during the middle of the day, or shaded in some way. The sun is very hot now through glass and will cause the plants to wilt badly and the soil to dry out rapidly, making a bad matter worse. In a few weeks most window plants can be set out or plunged in the garden until autumn.

Montbretia Tritonio.